V2-X

Dual Color LED RF Controller

- 4096 levels 0-100% dimming smoothly without any flash.
- Match with all RF 2.4G single zone or multiple zone dual color or single color remote control.
- One RF controller accept up to 10 remote control.
- Auto-transmitting function: Controller automatically transmit signal to
  another controller with 15m control distance.
- Synchronize on multiple number of controllers.
- Connect with external push switch to achieve on/off and 0-100% dimming function.
- Over-load / Short circuit / Over heat protection, recover automatically.
- Can be set 3 levels color temperature (WW, NW and CW) selectable by continuous power off
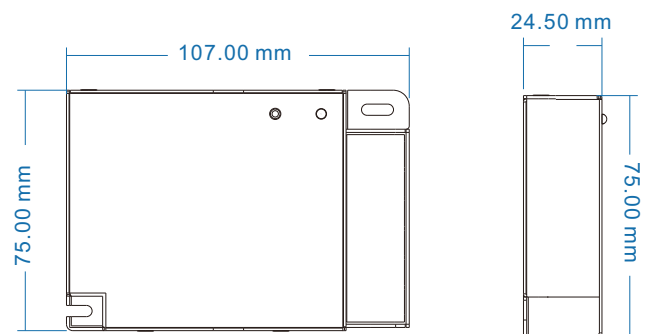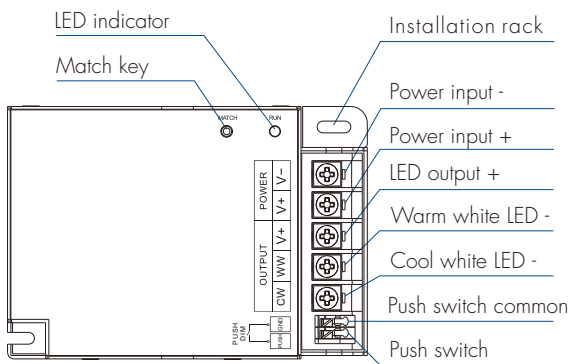 and on operation.

CE **RoHS** emc **RED**

V2-X
2CH LED RF Controller
Uin=12-36VDC
Iin=30.1A
2.4G
Uout=2x(12-36)VDC
Iout=2x15A
Pout=2x(180-540)W
Temp range: -30℃~+55℃
CE RoHS
MATCH RUN
POWER V+ V−
OUTPUT WW V+
CW
PUSH DIM

2 Channel / Step-less dimming / Wireless remote control /
Auto-transmitting / Synchronize / Push Dim / Multiple protection

Technical Parameters

Input and Output		Dimming data		Safety and EMC	
Input voltage	12-36VDC	Input signal	RF 2.4GHz + Push Dim	EMC standard (EMC)	ETSI EN 301 489-1 V2.2.3
Input current	30.1A	Control distance	15m(Barrier-free space)		ETSI EN 301 489-17 V3.2.4
Output voltage	2 x (12-36)VDC	Dimming gray scale	4096 (2^12) levels	Safety standard	EN 61348-1:2015+A1:2021
Output current	2CH,15A/CH	Dimming range	0 -100%		EN 61348-2-13:2014+A1:2017
Output power	2x(180-540)W	Dimming curve	Linear	Radio Equipment(RED)	ETSI EN 300 328 V2.2.2
Output type	Constant voltage	PWM frequency	2KHz	Certification	CE,EMC,RED
Warranty and Protection		**Package**		**Environment**	
Warranty	5 years	Size	L120 x W80 x H30mm	Operation temperature	Ta: -30℃ ~ +55℃
Protection	Reverse polarity,Over load Short circuit,Over heat	Gross weight	0.294kg	Case temperature (Max.)	Tc: +85℃
				IP rating	IP20

Mechanical Structures and Installations

LED indicator
Match key
Installation rack
Power input -
Power input +
LED output +
Warm white LED -
Cool white LED -
Push switch common
Push switch

MATCH RUN
POWER V+ V−
OUTPUT WW V+
CW
PUSH DIM

107.00 mm
75.00 mm

24.50 mm
75.00 mm

Match Remote Control (two match ways)

End user can choose the suitable match/delete ways. Two options are offered for selection:

Use the controller's Match key

Match:

Short press match key, immediately press on/off key (single zone remote)
or zone key (multiple zone remote) of the remote.
The LED indicator fast flash a few times means match is successful.

Delete:

Press and hold match key for 5s to delete all match,
The LED indicator fast flash a few times
means all matched remotes were deleted.
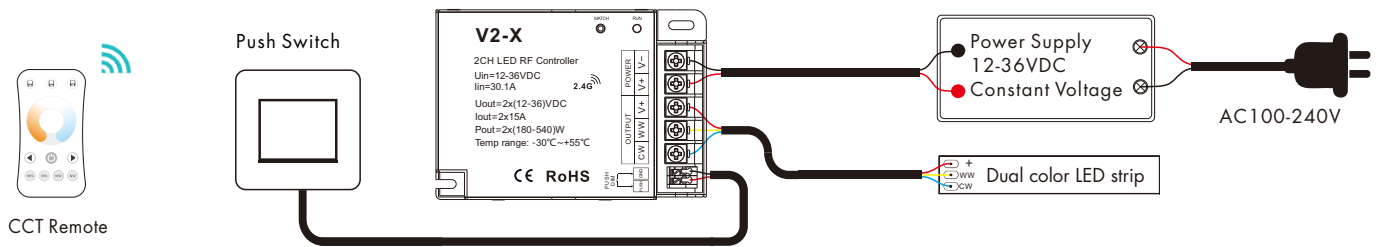
Use Power Restart

Match:

Switch off the power, then switch on power again,
immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 3 times on the remote.
The light blinks 3 times means match is successful.

Delete:

Switch off the power, then switch on power again,
immediately short press on/off key (single zone remote)
or zone key (multiple zone remote) 5 times on the remote.
The light blinks 5 times means all matched remotes were deleted.

Wiring Diagram

Note:

● Long press the match key for 15s to enable the continuous switch off-on two times rapidly to switch 3 levels color temperature function
  (This feature is disabled by factory default).
  Long press the match key for 10s to restore the factory setting.
● Power failure memory: after setting the light state for 5s, the current light state will be saved automatically, the light state will not be changed when re-powering.

Wire Preparation:

1. The wiring can be solid or stranded with a cross-sectional area of 0.5 to 2.5 mm².
   Conventional 1mm² can withstand 10A output current.
2. When wiring is installed, the terminals must be tightened.
   If they are not tightened, the contact point resistance will be too high and the terminals will
   easily burn due to heat when used at full load for a long time.
3. The output power of a constant voltage power supply should be at least 1.2 times that of the output load (light strip),
   otherwise the full power output of the load can easily cause automatic flickering or shaking of the light.

Push Dim

Click	ON/OFF
Long press(>1s) from OFF	Color temperature UP/DOWN (turn off and turn on to return dimming)
Long press(>1s) from ON	Dimming UP/DOWN

The provided Push-Dim interface allows for a simple dimming method using commercially available non-latching(momentary) wall switchs.
If more than one controller are connected to the same push switch, do a long press for more than 10s,
then the system is synchronized and all lights in the group dim up to 100%.
This means there is no need for any additional synchrony wire in larger installations.
We recommend the number of controllers connected to a push switch does not exceed 25 pieces,
the maximum length of the wires from push to controller should be no more than 20 meters.
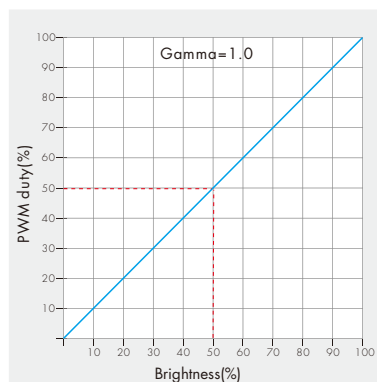
Dual color control

WW=Warm white LED   CW=Cool white LED

Each channel can supply up to 360W(@24V) and white balance can be controlled as such:

Color temperature	Cool white	Neutral white	Warm white
Power distribution	WW=0W,CW=360W	WW=180W,CW=180W	WW=360W,CW=0W

Linear dual color tuning

Dimming curve

Installation Precautions

1.The products shall not be stacked, the distance should be ≥ 20cm, so as not to affect lifespan of the products due to poor heat dissipation.
2.The product shall not be installed close to the switching power supply with an interval of ≥ 20cm to avoid radiation interference of the switching power supply.
3.The installation height shall be ≥ 1m from the floor to avoid shortening the remote control distance due to too weak reception signal.
4.The products are not allowed to be close to or covered by metal objects, with an interval of ≥ 20cm to avoid signal attenuation and shorten the remote distance.
5.Avoid installation at the corner of the wall or the corner of the beam, with an interval of ≥ 20cm to avoid signal interference.